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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/079,017	CURTIS, DONALD S.
	Examiner Susan Y. Chen	Art Unit 2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 19 January 2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-54 and 111-164 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-54 and 111-164 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>7/18/03, 1/19/05</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### ***Election/Restrictions***

This office action is responsive to the Election of Restriction filed on January 19, 2005. Applicant has elected group I -- claims 1-54 and 111-164 without traverse for continued prosecution.

### ***Specification***

The following is a quotation of the first paragraph of 35 U.S.C. 112:  
The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of 37 CFR 1.71(a)-(c):

- (a) The specification must include a written description of the invention or discovery and of the manner and process of making and using the same, and is required to be in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which the invention or discovery appertains, or with which it is most nearly connected, to make and use the same.
- (b) The specification must set forth the precise invention for which a patent is solicited, in such manner as to distinguish it from other inventions and from what is old. It must describe completely a specific embodiment of the process, machine, manufacture, composition of matter or improvement invented, and must explain the mode of operation or principle whenever applicable. The best mode contemplated by the inventor of carrying out his invention must be set forth.
- (c) In the case of an improvement, the specification must particularly point out the part or parts of the process, machine, manufacture, or composition of matter to which the improvement relates, and the description should be confined to the specific improvement and to such parts as necessarily cooperate with it or as may be necessary to a complete understanding or description of it.

The specification is objected to under 37 CFR 1.71 because the specification failing to provide an adequate written description of the invention.

Initially, the examiner notes the separate nature of the written description requirement as contrasted to the enablement requirement of the first paragraph of 35 U.S.C. 112. See *In re Barker*, 559 F.2d 588, 194 USPQ 470 (C.C.P.A. 1977). The function of the written description requirement is to ensure that the inventor had possession, as of the filing date of the application here relied on, of the specific subject matter later claimed by him. See *In re Edwards*, 568 F.2d 1349, 196 USPQ 465 (C.C.P.A. 1978). The question is not merely one of literal support for the questioned claim language in the original disclosure. it is one of the disclosure of concepts. See *In re Wilder*, 736 F.2d 1516 222 USPQ 369 (Fed. Cir. 1984) and *In re Kaslow*, 707 F.2d 1366, 217 USPQ 1089 (Fed. Cir. 1983). It appears that applicants has attempted to incorporate an abstract information infrastructure into their specification to thereby support claims to any combination or permutation of features therefrom. The fact that features are mentioned individually by the instant disclosure which contains even one page less than the total claims as originally filed does not mean that applicants have invented anything. There must be some evidence within the application filed that applicants were in possession of the claimed combinations. Incorporation by reference of a dictionary does not constitute disclosure of a novel which uses only words from that dictionary.

Similarly, without more, the stand alone abstract information infrastructure does not provide support for combining any features, regardless of what applicants may teach.

To be effective in showing possession of the invention, an incorporation of the links, structures and mechanism derived from the abstract information infrastructure which specifically contribute to the claimed features and for what purpose should be disclosed.

If applicants continue to prosecute the application, revision of the specification and claims to present the application in proper form is required. While an application can be amended to make it clearly understandable, no subject matter can be added that was not disclosed in the application as originally filed.

### ***Claim Objections***

Claims 111-164 are objected to under 37 CFR 1.75(c), as a duplicate set of claims that merely recited the same limitations as recited by claims 1-54 which fails to further limit the subject matter already stated in claims 1-54. Therefore, Applicant is required to cancel the claim(s).

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-54 and 111-164 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological art. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological art fail to promote the “progress of science and the useful arts” (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For claims to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) or mere implication of employing a machine or article of manufacture to perform some of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble. In *Bowman* (*Ex parte Bowman*, 61 USPQ2d 1665, 1671 (BD. Pat. App. & Inter. 2001) (Unpublished)), the board affirmed

the rejection under U.S.C. 101 as being directed to non-statutory subject matter. Although Bowman discloses transforming physical media into a chart and physically plotting a point on said chart, the Board held that the claimed invention is nothing more than an abstract idea, which is not tied to any technological art or environment. In the present case, although claims 1 and 111 recite a customer information management infrastructure at the preamble for managing integrated customer information set, however, the steps in the claim body are not tangibly embodied, which can be implemented by the mind of a person or by the use of a pencil and paper. In addition, the apparatus merely includes abstract means without target utility or software *per se* mechanism. In another words, since the claimed invention, as a whole, is not within the technological arts that produces a useful, concrete and tangible result as explained above, these claims only constitute an idea and does not apply, involve, use, or advance the technological arts, thus, it is deemed to be directed to non-statutory subject matter.

To expedite a complete examination of the instant application the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Claims 1-54 and 111-164 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 1, lines 2-3, it is unclear what meant by "each corresponding to one of a multiplicity of customers" [i.e., what does the claimed "each" refer to? Does it refer to "a multiplicity of customer information sets" or others? If it represents a multiplicity of customer information sets, then what is it meant by "a multiplicity of customer information sets corresponding to one of a multiplicity of customers"?] Furthermore, at lines 4-7 of the same claim, what does it mean "responsive to each of multiplicity of substantially simultaneous service request, ....the customer information set corresponding to the selected customer determines, for each of a plurality of channels of the infrastructure" [i.e., the misuse of punctuation and the broken English language grammar renders the piece meal claim to be indistinct.]

As to claims 2-13, 15-23, 25, 27-32, 34-39, 41, 43-47 and 51-54, these claims extensively use the term "configure to" and "wherein" phrases but the instant specification fails to provide actual steps to perform or limit these claims to a particular structure, thus, these terms render the claimed scope to be indistinct. See *In re Markman v. Westview Instruments*, 52 F.3d 967, 980, 34 USPQ2d 1321, 1330 (Fed. Cir.) (*en banc*), *off' d*, U.S., 116 Ct. 1384 (1996).

As to claims 14, 24, 26, 33, 40, 42 and 48-50, these claims have the same defects as their base claim, hence are rejected for the same reason.

As to claims 111-164, these set of claims merely recite the same limitations as of claims 1-54, hence are rejected for the same reason.

Because the ambiguous nature of instant invention, the following art rejection is to the best as the examiner is able to ascertain.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-23, 33-54, 111-133 and 143-164 are rejected under 35 U.S.C. 102(e) as being anticipated by Bhoj et al. (U.S. Patent No. 6,304,892).

The prior art of Bhoj (U.S. Patent No. 6,304,892) is submitted in the Information Disclosure Statement (IDS) filed by Applicant on July 18, 2003.

As to claim 1, Bhoj et al. (hereinafter referred as Bhoj) discloses the following as claimed by applicant, comprising:

a) a customer information management infrastructure [e.g., the Internet information management infrastructure as shown by Fig. 3; col. 4, line 29-31] having  
b) an integrated customer information store comprising a multiplicity of customer information sets, each corresponding to one of a multiplicity of customers [e.g., the Service Level Agreements (SLA) database, col. 10, line 46], wherein responsive to each of a multiplicity of substantially simultaneous service requests, each service request pertaining to a selected customer of the multiplicity of customers, the customer information set corresponding to the selected customer determines, for each of a plurality of channels of the infrastructure, a set of user-device interactions between a user and the infrastructure, and a set of infrastructure-component interactions among a plurality of components of the infrastructure [e.g., the federated system having

respective service manage systems (e.g., units: 31a-33a, Fig. 3) of data service systems (e.g., units: 31-33, Fig. 3) which use the stored SLA to determine and setup a set of user-device interactions between user and the Federate infrastructure. (e.g., col. 3, line 53 – col. 4, line 11; col. 5, line 50 – col. 7, line 7)].

As to claims 2 and 11-12, except the features recited in claim 1, Bhoj further discloses that the integrated customer information store has a legacy system of the infrastructure [e.g., the units: 42 and 43, Fig. 4].

As to claims 3-10, the claimed features “the infrastructure supporting multiplicity of customer set from 10,000 to 50,000,000 at the rate of 10/service requests/second to 500 service/second is done as default of an Internet Infrastructure].

As to claims 13-15, 18 and 21, except the features recited in claim 1, Bhoj further discloses an Authentication & authorization module [e.g., the unit: 230, Fig. 5] to perform the claimed features [e.g., Fig. 6 and associated texts].

As to claims 16-17 and 22, Bhoj further discloses that the set of service request and devices available to the user is base on the selection in customer information set [e.g., col. 6, lines 15-61].

As to claims 19-20, the claimed features that user role is selected by the user and an administrator is a default nature of SLA.

As to claim 23, Bhoj further discloses that the set of service request available to each user is presented to the user via Web-published services [e.g., the unit: 304, Fig. 7, col. 14, lines 41-44; Fig. 10 and associated texts].

As to claims 33-39, Bhoj further discloses the claimed feature of business-workflow service [e.g., Fig(s). 8-9 and associate texts], appserver layer [e.g., Fig. 6 and associated texts], and legacy-system functions calls [e.g., the Verify-With-Values(), Verify-Assertions-With-Values(), and GetSystem-Variable-Value() function calls at col. 13, lines 1-38].

As to claims 40-47 and 49, Bhoj further discloses that the information infrastructure having interaction-monitor service which monitors a sequence of legacy-system-layer transactions executed by the system and responsive to a failure transaction directs a reversal processing of the sequence of the transactions before failure [e.g., the unit 250, Fig. 5; col. 12, line 53 – col. 13, line 44, Fig. 6 and associated texts].

As to claims 48 and 50-54, Bhoj further discloses that the information infrastructure having system management service that directs the execution of a

plurality of logical legacy-system-layer interactions corresponding to the execution requests from the set of infrastructure-component [e.g., the units: 200, Fig. 5 and associated texts; col. 11, lines 5-65]; furthermore, the system management service is configured to manage, responsive to workload levels in the logical appserver layer, processing the plurality of logical legacy-system-layer interactions [e.g., the unit: 100, Fig. 5 and associated texts].

As to claims 111-133 and 143-164, these claims recites the same subject matters as claims 1-23 and 33-54, hence are rejected for the same reason.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 24-32 and 134-142 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bhoj et al. (U.S. Patent No. 6,304,892) in view of Campbell et al. (U.S. Patent No. 6,856,970).

As to claims 24-32, Bhoj discloses all the limitation as recited in the claims 1-23 above, except he did not specifically disclose the infrastructure system having an indexing store related to the input/output data parameter format of legacy-system service function calls as claimed by the applicant.

However, Campbell disclose an information infrastructure [e.g., the Abstract, Fig(s) 1-52 and associated texts] comprising an index store [e.g., the HUB database (unit: 103, Fig. 32); Abstract, lines 16-30] with index schema and mapping rules to control the interactive system input/output parameter formatting/routing/addressing related to the legacy-system service function calls as claimed by the applicant [col. 11, lines 64 – col. 13, line 11; Fig. 32 and associated texts starting at the application Loading section of col. 14, line 21].

Bhoj and Campbell are in the same field to manage information infrastructure via Internet protocol, therefore, with the teaching of Bhoj and Campbell in front of him/her, an ordinary skilled person in the art at the time the invention was made would be motivated to combined the index store technique as taught by Campbell into Bhoj's system to control the interactive system input/output parameter formatting / routing / addressing related to the legacy-system function calls. Because by doing so, the combined system will be able to facilitate the financial transaction archiving via a faster lookup indexing schema.

As to claims 134-142, these claims recite the same features as claims 27-32, thus, are rejected for the same reason.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Misheski et al. (U.S. Patent No. 6,298,476) which discloses an object oriented software build framework mechanism.

McDysan (U.S. Patent No. 6,778,498) which discloses a virtual private network customer information management system that premises equipment edge router.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Y. Chen whose telephone number is 571-272-4016. The examiner can normally be reached on Monday - Friday from 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2161

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Susan Y Chen  
Examiner  
Art Unit 2161

April 26, 2005

  
UYEN LE  
PRIMARY EXAMINER